CLAIMS:

1. A high frequency component with a substrate constructed of a plurality of dielectric layers and, between them, electrode layers having conducting track structures, in which substrate at least one capacitive element and at least one inductive element is formed, whereby at least one arrangement of opposed conducting track structures (10, 12; 10, 22) is provided, these realizing simultaneously a capacitive and an inductive element, whereby the common-mode impedance and the push-pull impedance between at least two opposing conducting track structures are adjusted to differ by a factor of at least 2.

2. A high frequency component according to Claim 1, characterized in that the conducting track structures are linked to each other at least at one site by a conductor or with fixed potentials.

3. A high frequency component according to Claim 1, characterized in that the common-mode impedance and the push-pull impedance between at least two opposing conducting track structures are adjusted to differ by a factor of at least 10.

4. A high frequency component according to Claim 1, characterized in that the thickness *d* of the dielectric layer arranged between the opposed conducting track structures (10, 12; 20, 22) is smaller than the width *b* and preferably smaller than half the width *b* of the conducting tracks.

5. A high frequency component according to Claim 1, characterized in that the thickness *d* of the dielectric layer arranged between the opposed conducting track structures (10, 12; 20, 22) is smaller than one fifth, and preferably smaller than one twentieth of the width *b* of the conducting tracks.

6. A high frequency component according to one of the claims 1 to 5, characterized in that the dielectric layer (52) between the opposed conducting track structures has an increased dielectric constant compared with the surrounding dielectric layers (54).

7. A high frequency component according to one of the claims 1 to 5, characterized in that the dielectric layer between the opposed conducting track structures has a dielectric constant of greater than 5, and preferably greater than 10 and further preferably greater than 17.

8. A high frequency component according to one of the claims 1 to 5, characterized in that the dielectric layer between the opposed conducting track structures has a dielectric constant of greater than 70.

9. A high frequency component according to one of the claims 1 to 5, characterized in that the layer between the opposed conducting tracks contains materials with barium-rare earth-titanium-perovskites, barium-strontium-titanates, bismuth pyrochlore structures, tantalum oxides, magnesium-aluminium-calcium-silicates, (calcium, strontium)-zirconates and/or magnesium titanates, also in combination with boron or lead silicate glasses.

10. A high frequency component according to one of the claims 1 to 9, characterized in that the substrate is a ceramic laminate as a low temperature co-fired ceramics (LTCC) material or a high temperature co-fired ceramics (HTCC) material, an organic laminate, a semiconductor substrate or a substrate based on thin film technology.

11. A high frequency component according to one of the claims 1 to 10, characterized in that the working frequency is above 400 MHz.

12. A high frequency component according to one of the claims 1 to 11, characterized in that the conducting track width of one of the conductor structures is increased by $2k$, where k is at least 70% of the sum of the expected layer offset v of the conducting track structures and half the thickness d of the dielectric layer situated between the conducting track structures.

13. A high frequency component according to one of the claims 1 to 11, characterized in that the conducting track on one electrode layer has sections running in the same direction and that the separation of these sections for an opposing electrode layer is

increased by $2k$, whereby k is at least 50% of the sum of the expected layer offset v of the electrode layers and half the thickness d of the dielectric layer situated between the electrode layers.

14. A high frequency component according to Claim 1, characterized in that two conducting tracks are coupled by a bridge (90) linking them or by a common conducting member (92).

15. A high frequency component according to Claim 14, characterized in that the bridge or the conducting member is a connection between two electrode layers.

16. A resonator in a high frequency component according to one of the claims 1 to 15, characterized in that in at least one arrangement of opposed conducting tracks (10, 12; 20, 22), one start (18, 26) of a conducting track (10, 20) is placed at the same potential as one end (16, 24) of the opposed conducting track (12, 22) or is connected to it via a conductor.

17. A resonator in a high frequency component according to Claim 16, characterized in that the connecting conductor is designed as a non-overlapping extension of conducting tracks of the opposed conductor structures and/or as at least one lead-through through at least one insulating layer.

18. A resonator in a high frequency component according to one of the claims 1 to 17, characterized in that in at least one arrangement of opposed conducting tracks (10, 12; 20, 22), one start (18, 26) of a conducting track (10, 20) and one end (16, 24) of the opposed conducting track (12, 22) are connected to a fixed potential, particularly earth.

19. A resonator according to Claim 16 or 17, characterized in that one free end (11, 13, 29, 30, 36, 37) of one of the conducting tracks is placed at a fixed potential, in particular, earth.

20. A resonator according to one of the claims 16 to 19, characterized in that at least one free end (10, 11, 29-37) is extended with a conducting track and/or connected to earth with a capacitor.

21. A resonator according to one of the claims 16 to 20, characterized in that on at least one side of the opposed conducting track structures, an earth surface (56) is provided.

22. A resonator according to one of the claims 16 to 21, characterized in that the opposed conducting track structures are surrounded by magnetic materials.

23. A filter with at least one resonator according to one of the claims 16 to 22, whereby the input and output of signals and the coupling of the resonators between themselves takes place directly via a conducting track connected to a conducting track structure, inductively through conducting tracks running parallel in places and/or capacitively via a capacitor.

24. A filter with least two resonators according to one of the claims 16 to 22, whereby at least one coupling between two resonators is generated through a common conducting track member connected to earth.

25. A balancing transformer (balun) having at least one resonator according to one of the claims 16 to 22, whereby the input of signals takes place symmetrically and the output takes place asymmetrically.

26. An adaptor network having at least one resonator according to one of the Claims 16 to 22, whereby the impedance of the couplings is determined by their positioning on the respective conducting track structure.

27. A network with at least one resonator according to one of the claims 16 to 22, which performs the function of a filter, a balancing transformer and/or of an adaptor network.

28. A high frequency module with at least one of the components claimed in Claims 1 to 27.

29. A high frequency module according to Claim 28, which performs the function of a transmitting and receiving module.